

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

1. (currently amended) A process of identifying and managing interactive support service applications associated with consumer electronic devices, the process for execution by a gateway device communicatively coupled with each of the electronic devices via a home network, the gateway device being operative to access the Internet and being communicatively coupled with a display unit, comprising:

determining device identification information associated with a selected one of the electronic devices for which a support service application is required;

providing said device identification information to a selected server computing system via the Internet;

downloading an interactive support service application associated with said selected device from the selected server computing system; and

executing said downloaded interactive support service application at the gateway device to provide a remote interactive support service process for said selected device, wherein said interactive support service application comprises a diagnostic application including instructions executable by said gateway device ~~selected device~~ to ~~automatically~~ determine a current functional state of said selected device and determine diagnostic information based on said current functional state of said selected device, said diagnostic information indicating a problem associated with said selected device.

2. (previously presented) The process of identifying and managing interactive support service applications as recited in claim 1 wherein said interactive support service process

comprises a remote interactive manual providing educational instructions to a home network system user regarding operation of said selected device.

3. (previously presented) The process of identifying and managing interactive support service applications as recited in claim 1 wherein said interactive support service process comprises a remote interactive maintenance process for instructing a home network system user in solving maintenance problems associated with said selected device.

4. (previously presented) The process of identifying and managing interactive support service applications as recited in claim 1 wherein said diagnostic application comprises a remote interactive diagnostic process comprising:

communicating with said selected device via said home network in order to determine said current functional state of said selected device; and

displaying information indicative of said current functional state of said selected device on the display unit.

5. (previously presented) The process of identifying and managing interactive support service applications as recited in claim 4 wherein said diagnostic process further comprises:

displaying said diagnostic information on the display unit.

6. (previously presented) The process of identifying and managing interactive support service applications as recited in claim 5 wherein said diagnostic process further comprises:

transmitting said diagnostic information to the server computing system for the purpose of creating a database record based on said diagnostic information and said associated device identification information.

7. (previously presented) The process of identifying and managing interactive support service applications as recited in claim 4 wherein said diagnostic process further comprises:
- determining user instructional information based on said current functional state of said selected device, said instructional information for providing instructions to the user for operating said selected device; and
 - displaying said user instructional information on the display unit.
8. (previously presented) The process of identifying and managing interactive support service applications as recited in claim 5 wherein said diagnostic process further comprises:
- determining user instructional information based on said diagnostic information, said instructional information for providing instructions to the user for solving said problem associated with said selected device; and
 - displaying said user instructional information on the display unit.
9. (currently amended) The process of identifying and managing interactive support service applications as recited in claim 1 wherein ~~said step of~~ providing said device identification information to a selected server computing system comprises:
- forming a uniform resource locator based on said device identification information; and
 - accessing said selected server via the Internet using said uniform resource locator.
10. (previously presented) The process of identifying and managing interactive support service applications as recited in claim 9 wherein said device identification information includes associated vendor information indicative of a vendor of the selected device, and model information indicative of the model of the selected device.

11. (currently amended) The process of identifying and managing interactive support service applications as recited in claim 10 wherein ~~said step of~~ forming a uniform resource locator comprises:

- determining a host name based on said vendor information;
- determining a file path based on said model information; and
- forming the uniform resource locator based on said host name and said file path.

12. (currently amended) The process of identifying and managing interactive support service applications as recited in claim 10 wherein ~~said step of~~ forming a uniform resource locator comprises:

- determining a host name based on said vendor information; and
- forming the uniform resource locator based at least in part on said host name.

13. (previously presented) The process of identifying and managing interactive support service applications as recited in claim 1 wherein said interactive support service process further comprises:

- generating and displaying a help menu enabling a user of the gateway device to select from a list of help topics associated with operation of the selected device;
- receiving user input indicative of a selected help topic;
- providing information indicative of said selected help topic to the server computing system; and
- downloading a document from the server computing system, said document providing information associated with said selected device under said selected help topic.

14. (previously presented) The process of identifying and managing interactive support service applications as recited in claim 4 wherein said interactive support service process further comprises:

providing information indicative of said current functional state to the server computing system for the purpose of accessing a selected document based on said current functional state; and

downloading a document from the server computing system, said document providing instructional information about the selected device taking into account said current functional state.

15. (previously presented) The process of identifying and managing interactive support service applications as recited in claim 5 wherein said remote interactive support service process further comprises:

providing said diagnostic information to the server computing system for the purpose of accessing a selected document based on said problem associated with said selected device; and

downloading a document from the server computing system, said document providing instructional information for solving said problem associated with said selected device.

16. (currently amended) A service management software system for execution by a gateway device communicatively coupled with at least one electronic device via a home network, the software system for identifying and managing interactive support service applications associated with each of the electronic devices, the gateway device being operative to access the Internet, comprising:

a home network bridge supported by a platform for receiving device identification information associated with a selected one of the electronic devices for which a service application is required;

a service manager supported by the platform and being operative to form a uniform resource locator based at least in part on said device identification information; and

an internet bridge supported by the platform and being responsive to receive said uniform resource locator from said service manager via the platform, and being operative to access a selected server computing system via the Internet using said uniform resource locator, and to download an interactive support service application associated with said selected device, wherein the platform is operative to dynamically load and unload support service applications and further wherein said interactive support application comprises a diagnostic application including instructions executable by said gateway device ~~selected device~~ to ~~automatically~~ determine a current functional state of said selected device and determine diagnostic information based on said current functional state of said selected device, said diagnostic information indicating a problem associated with said selected device.

17. (previously presented) The service management software system as recited in claim 16 wherein said device identification information includes associated vendor information indicative of a vendor of the selected device, and model information indicative of the model of the selected device.

18. (previously presented) The service management software system as recited in claim 17 wherein said service manager is operative to form said uniform resource locator by:
determining a host name based on said vendor information;
determining a file path based on said model information; and
forming the uniform resource locator based on said host name and said file path.

19. (previously presented) The service management software system as recited in claim 17 wherein said interactive support service application is operative to implement a remote

interactive manual process for providing educational instructions to the user regarding operation of said selected device.

20. (previously presented) The service management software system as recited in claim 17 wherein said interactive support service application is operative to implement a remote interactive maintenance process for instructing the user in solving maintenance problems associated with said selected device.

21. (previously presented) The service management software system as recited in claim 17 wherein said diagnostic support service application is operative to implement a remote interactive support service process comprising:

communicating with said selected device via said home network in order to determine said current functional state of said selected device; and

displaying information indicative of said current functional state of said selected device on the display unit.

22. (previously presented) The service management software system as recited in claim 20 wherein said interactive support service process further comprises:

displaying said diagnostic information on the display unit.

23. (previously presented) The service management software system as recited in claim 22 wherein said interactive support service application further comprises:

transmitting said diagnostic information to the server computing system for the purpose of creating a database record based on said diagnostic information and said associated device identification information.

24. (previously presented) The service management software system as recited in claim 21 wherein said interactive support service application further comprises:

determining user instructional information based on said current functional state of said selected device, said instructional information for providing instructions to the user for operating said selected device; and

displaying said user instructional information on the display unit.

25. (currently amended) A process of identifying and providing interactive support service applications associated with consumer electronic devices, the process for execution by a server computing system that is communicatively coupled with at least one client computing system via the Internet, comprising:

receiving device identification information from a client computing system, the device identification information indicating a particular consumer electronic device;

accessing a selected interactive support service application associated with the particular device based on said device identification information; and

providing said selected interactive support service application associated with the particular device to the client computing system, said selected interactive support application including instructions executable by the client computing system for providing an interactive support service process associated with the particular device, wherein said selected interactive support application comprises a diagnostic application including instructions executable by said client computing system ~~particular device~~ to ~~automatically~~ determine a current functional state of said particular device and determine diagnostic information based on said current functional state of said particular device, said diagnostic information indicating a problem associated with said selected device.

26. (previously presented) The process as recited in claim 25 wherein said device identification information comprises vendor information indicative of the vendor of the particular device, and model information indicative of the model of the particular device.

27. (previously presented) The process as recited in claim 26 wherein the device identification information further comprises a serial number of the particular device.

28. (previously presented) The process as recited in claim 25 wherein the client computer system is communicatively coupled with the particular device, and wherein said diagnostic application includes instructions executable by the client computing system for diagnosing problems associated with the particular device by communicating with the particular device, further comprising:

receiving diagnosis information from the client computing system, said diagnosis information indicating a diagnosed problem associated with the particular device that is determined as a result of execution of said interactive support service application by the client computing system; and

creating a database record based on said diagnosis information and said device identification information, said record indicating said diagnosed problem associated with the particular device.

29. (previously presented) The process as recited in claim 25 wherein said interactive support service application comprises instructions executable by the client computing system for generating a help menu enabling a user of the client computing system to select from a list of help topics associated with operation of the particular device, the process further comprising:

receiving information indicative of a selected help topic from the client computing system;

accessing a selected document based on said selected help topic; and
providing said selected document to the client computing system, said selected document providing educational information regarding operation of the particular device.

30. (previously presented) The process as recited in claim 29 wherein the client computer system is communicatively coupled with the particular device, and wherein said selected document further comprises embedded instructions executable by the client computing system for executing an interactive manual support service process for educating a user regarding operation of the particular device, said manual support service process including determining a current functional state of the particular device.

31. (previously presented) The process as recited in claim 25 wherein the client computer system is communicatively coupled with the particular device, and wherein said interactive support service application comprises instructions executable by the client computing system for implementing an interactive manual service for educating a user regarding operation of the particular device.

32. (previously presented) The process as recited in claim 25 wherein the client computer system is communicatively coupled with the particular device, and wherein said interactive support service application comprises instructions executable by the client computing system for implementing an interactive maintenance service enabling a user to solve maintenance problems associated with the particular device.

33. (previously presented) The process as recited in claim 28 wherein the client computing system is a gateway device communicatively coupled with said particular device via a home network, and wherein said diagnostic application comprises instructions executable by the gateway device for implementing a remote process comprising:

communicating with the particular device via the home network in order to determine said current functional state of the particular device; and

displaying information indicative of said current functional state of the particular device on a display unit.

34. (previously presented) The process as recited in claim 33 further comprising:
receiving information indicative of a current functional state of the particular device;
accessing a selected document based on the current functional state; and
providing said selected document to the gateway device, said selected document providing educational information regarding operation of the particular device taking into account its current functional state.

35. (previously presented) The process as recited in claim 33 wherein said remote interactive service process further comprises:

transmitting said diagnostic information to the client computing system; and
displaying said diagnostic information on the display unit.

36. (previously presented) The process as recited in claim 33 further comprising:
receiving diagnostic information from the client computing system, the diagnostic information indicating a problem associated with the particular device;
accessing a selected document based on the diagnostic information; and

providing said selected document to the client computing system, said selected document providing instructions for solving the problem associated with the particular device.

37. (previously presented) The process as recited in claim 33 wherein said remote interactive service process further comprises:

determining user instructional information based on said current functional state of the particular device, said instructional information for providing instructions to the user for operating said selected device; and

displaying said user instructional information on the display unit.

38. (previously presented) The process as recited in claim 35 wherein said remote interactive service process further comprises:

determining user instructional information based on said diagnostic information, said instructional information for providing instructions to the user for solving said problem associated with said selected device; and

displaying said user instructional information on the display unit.

39. (currently amended) A process of identifying and providing interactive support service applications associated with consumer electronic devices, the process for execution by a server computing system that is communicatively coupled with at least one client computing system via the Internet, the client computing system being communicatively coupled with at least one electronic device, the process comprising:

receiving device identification information from the client computing system, the device identification information indicating a particular consumer electronic device that is communicatively coupled with the client computing system;

providing an interactive support service application associated with the particular device to the client computing system via the Internet, the application including instructions executable by the client computing system for providing an interactive support service process including ~~automatically~~ determining a current functional state of said selected device and a problem associated with the particular device;

receiving diagnosis information from the client computing system, said diagnosis information indicating a diagnosed problem associated with the particular device that is determined as a result of execution of said instructions by the client computing system; and

creating a database record based on said diagnosis information and said device identification information, said record indicating said diagnosed problem associated with the particular device.

40. (previously presented) The process as recited in claim 39 wherein said interactive support service application comprises instructions executable by the client computing system for generating a help menu enabling a user of the client computing system to select from a list of help topics associated with operation of the particular device, the process further comprising:

receiving information indicative of a selected help topic from the client computing system;

accessing a selected document based on said selected help topic; and

providing said selected document to the client computing system, said selected document providing educational information regarding operation of the particular device.

41. (previously presented) The process as recited in claim 39 wherein said interactive support service application comprises instructions executable by the client computing system for generating a help menu enabling a user of the client computing system to select from a list of help topics associated with maintenance of the particular device, the process further comprising:

providing a selected document to the client computing system in response to information received from the client computing system indicating a selected help topic, said selected document providing instructional information associated with the particular device under the selected topic.

42. (previously presented) The process as recited in claim 39 wherein providing an interactive support service application comprises:

receiving a query including device identification information indicating the particular device from said client computing system; and

determining said diagnostic service application associated with the particular device based on said device identification information.

43. (previously presented) The process as recited in claim 39 wherein said interactive support service application comprises instructions executable by the client computing system for executing an interactive manual service for educating a user regarding operation of the particular device.

44. (previously presented) The process as recited in claim 39 wherein said interactive support service application comprises instructions executable by the client computing system for executing an interactive maintenance service enabling a user to solve maintenance problems associated with the particular device.

45. (previously presented) The process as recited in claim 39 wherein the client computing system is a gateway device communicatively coupled with said particular device via a home network, and wherein said interactive support service application comprises instructions executable by the gateway device for implementing a remote interactive service process comprising:

communicating with the particular device via the home network in order to determine a current functional state of the particular device; and

displaying information indicative of said current functional state of the particular device on a display unit.

46. (previously presented) The process as recited in claim 45 wherein said remote interactive service process further comprises:

determining diagnostic information based on said current functional state of the particular device, said diagnostic information indicating a problem associated with the particular device;

transmitting said diagnostic information to the client computing system; and

displaying said diagnostic information on the display unit.

47. (previously presented) The process as recited in claim 45 wherein said remote interactive service process further comprises:

determining user instructional information based on said current functional state of the particular device, said instructional information for providing instructions to the user for operating said selected device; and

displaying said user instructional information on the display unit.

48. (previously presented) The process as recited in claim 46 wherein said remote interactive service process further comprises:

determining user instructional information based on said diagnostic information, said instructional information for providing instructions to the user for solving said problem associated with said selected device; and

displaying said user instructional information on the display unit.

49. (previously presented) The process as recited in claim 39 wherein providing an interactive support service application associated with a particular consumer electronic device comprises:

receiving device identification information from the client computing system, the device identification information including vendor information indicative of the vendor of the particular device, and model information indicative of the model of the particular device; and

determining the interactive support service application associated with the particular device based on the device identification information.

50. (previously presented) The process as recited in claim 49 wherein the device identification information further comprises a serial number of the particular device.

51. (previously presented) The process as recited in claim 47 further comprising:

receiving information indicative of a current functional state of the particular device;

accessing a selected document based on the current functional state; and

providing said selected document to the client computing system, said selected document providing educational information regarding operation of the particular device taking into account its current functional state.

52. (previously presented) The process as recited in claim 46 further comprising:
receiving diagnostic information from the client computing system, the diagnostic information indicating a problem associated with the particular device;
accessing a selected document based on the diagnostic information; and
providing said selected document to the client computing system, said selected document providing instructions for solving the problem associated with the particular device.
53. (currently amended) A process of identifying and managing interactive support service applications associated with consumer electronic devices, the consumer electronic devices coupled together within a home network including a gateway device coupled to access the Internet and coupled to a display unit, the process executed by the gateway device comprising:
determining device identification information associated with a selected one of the electronic devices for which a support service application is required;
providing the device identification information to a support server computing system via the Internet;
downloading an interactive support service application associated with the selected device from the support server computing system, the interactive support service application comprising a diagnostic application including instructions executable by the gateway device ~~selected device~~ to ~~automatically~~ determine a current functional state of the selected device and determine diagnostic information indicating a problem associated with the selected device based on the current functional state of the selected device; and
executing the downloaded interactive support service application at the gateway device to provide a remote interactive support service process for the selected device.

54. (currently amended) A process of identifying and managing interactive support service applications associated with consumer electronic devices, the consumer electronic devices coupled together within a home network including a gateway device coupled to access the Internet and coupled to a display unit, the process executed by the gateway device comprising:

determining device identification information associated with a selected one of the electronic devices for which a support service application is required;

providing the device identification information to a support server computing system via the Internet;

downloading an interactive support service application associated with the selected device from the support server computing system, the interactive support service application comprising one or more of a remote support service application regarding use of the selected device, a remote interactive diagnosis support service application enabling remote and interactive determination of a current functional state of the selected device and diagnostic information indicating a problem associated with the selected device based on the current functional state of the selected device, and a remote maintenance support service application providing for performance of remote maintenance functions on the selected device;

executing the downloaded interactive support service application at the gateway device to provide a remote interactive support service process for the selected device and to determine the current functional state of the selected device; and

displaying information indicative of the current functional state of the selected device and user instructional information corresponding to the current functional state on the display unit.